

Title (en)
Ignition coil

Title (de)
Zündspule

Title (fr)
Bobine d'allumage

Publication
EP 0703588 A1 19960327 (EN)

Application
EP 95115090 A 19950925

Priority
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Abstract (en)
An ignition coil (1) has a cylindrical case (100) for directly mounting on a spark plug. The case 100 accommodates a transformer unit (5) which includes a primary coil (516) wound around a primary spool(514), a secondary coil (512) wound around a secondary spool (510) and a plurality of magnetic circuit members (502, 504, 506) therein hermetically. The primary spool and the secondary spool have supporting members (514a, 510a) respectively. When they are assembled, the magnetic circuit members are retained between the spools automatically. The spools have insulating members (514f, 510f) interposed between the magnetic circuit members and a lead of the primary coil at an upper portion of the coil to increase the creepage distance between members connected respectively to the secondary coil and the primary coil. <IMAGE>

IPC 1-7
H01F 38/12; **H01F 27/02**; **H01F 27/32**; **H01F 27/26**

IPC 8 full level
H01F 27/02 (2006.01); **H01F 27/26** (2006.01); **H01F 27/32** (2006.01); **H01F 38/12** (2006.01)

CPC (source: EP KR)
H01F 5/00 (2013.01 - KR); **H01F 27/02** (2013.01 - EP); **H01F 27/266** (2013.01 - EP); **H01F 27/325** (2013.01 - EP); **H01F 38/12** (2013.01 - EP); **H01F 2005/025** (2013.01 - EP); **H01F 2038/122** (2013.01 - EP); **H01F 2038/125** (2013.01 - EP)

Citation (applicant)
• US 5101803 A 19920407 - NAKAMURA NAOTAKA [JP], et al
• US 4617907 A 19861021 - JOHANSSON SVEN H [SE], et al
• JP S60501961 A 19851114

Citation (search report)
• [XAY] EP 0048632 A1 19820331 - NIPPON DENSO CO [JP]
• [YA] DE 3404064 A1 19841108 - AISIN SEIKI [JP]
• [XY] WO 8500930 A1 19850228 - SAAB SCANIA AB [SE]
• [YA] US 1977122 A 19341016 - EHRLICH LOUIS B, et al
• [A] EP 0431322 A1 19910612 - NIPPON DENSO CO [JP]
• [A] EP 0020009 A1 19801210 - LUCAS IND PLC [GB]
• [A] DE 4132851 A1 19920416 - MITSUBISHI ELECTRIC CORP [JP]
• [A] US 4714909 A 19871222 - DUGAS ROGER A [US]

Cited by
DE19829845C2; EP1426985A3; US6836203B2; EP0848394A1; EP1304708A1; ES2155365A1; EP0837481A3; EP1655748A3; US7071804B2; US6747540B1; US7471002B2; US6213109B1; US6237578B1; US6930583B2; US6995644B2; US7068135B1

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